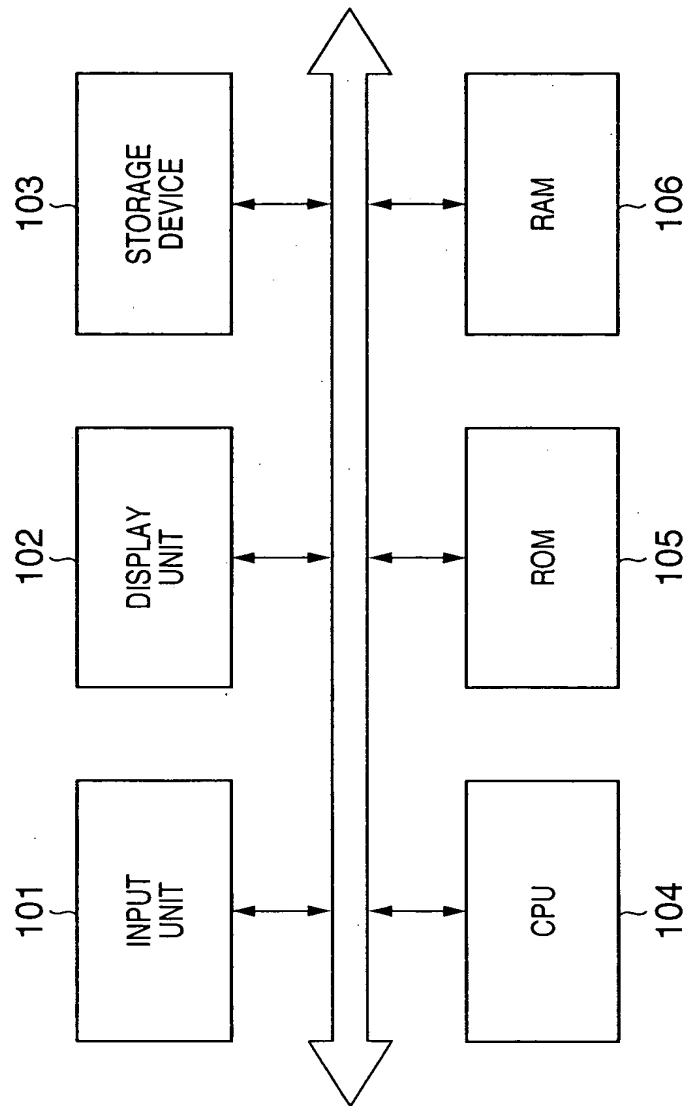


**FIG. 1**

# FIG. 2

MEDIA NAME	COLOR SPACE	BIT PRECISION
PROFESSIONAL PHOTO PAPER	xRGB	16
GLOSSY PAPER	xRGB	16
...	...	...
POSTCARD	sRGB	8
PLAIN PAPER	sRGB	8

MEDIA INFORMATION DATABASE 201

**FIG. 3**

301

PRINT IMAGE

CONNECTED PRINTERS

BJF900

BJS700

BJS200

LE4210

LO3333

303

PRINT

PRINT SETTINGS

302

MEDIUM

PRINT MODE

PAPER SIZE

PHOTO PAPER

SPECIAL-PURPOSE PAPER

PLAIN PAPER

OHP

FINE

ORDINARY

QUICK

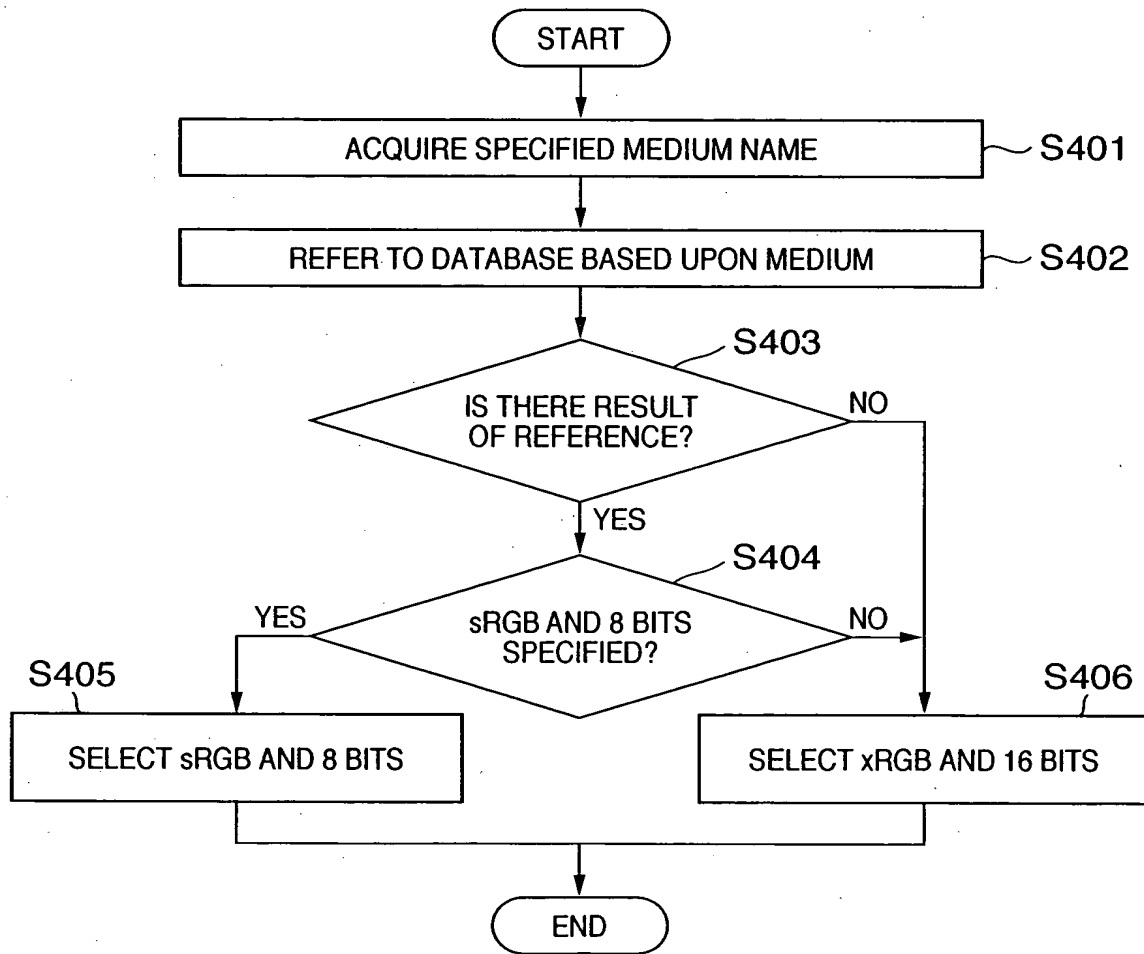
A4

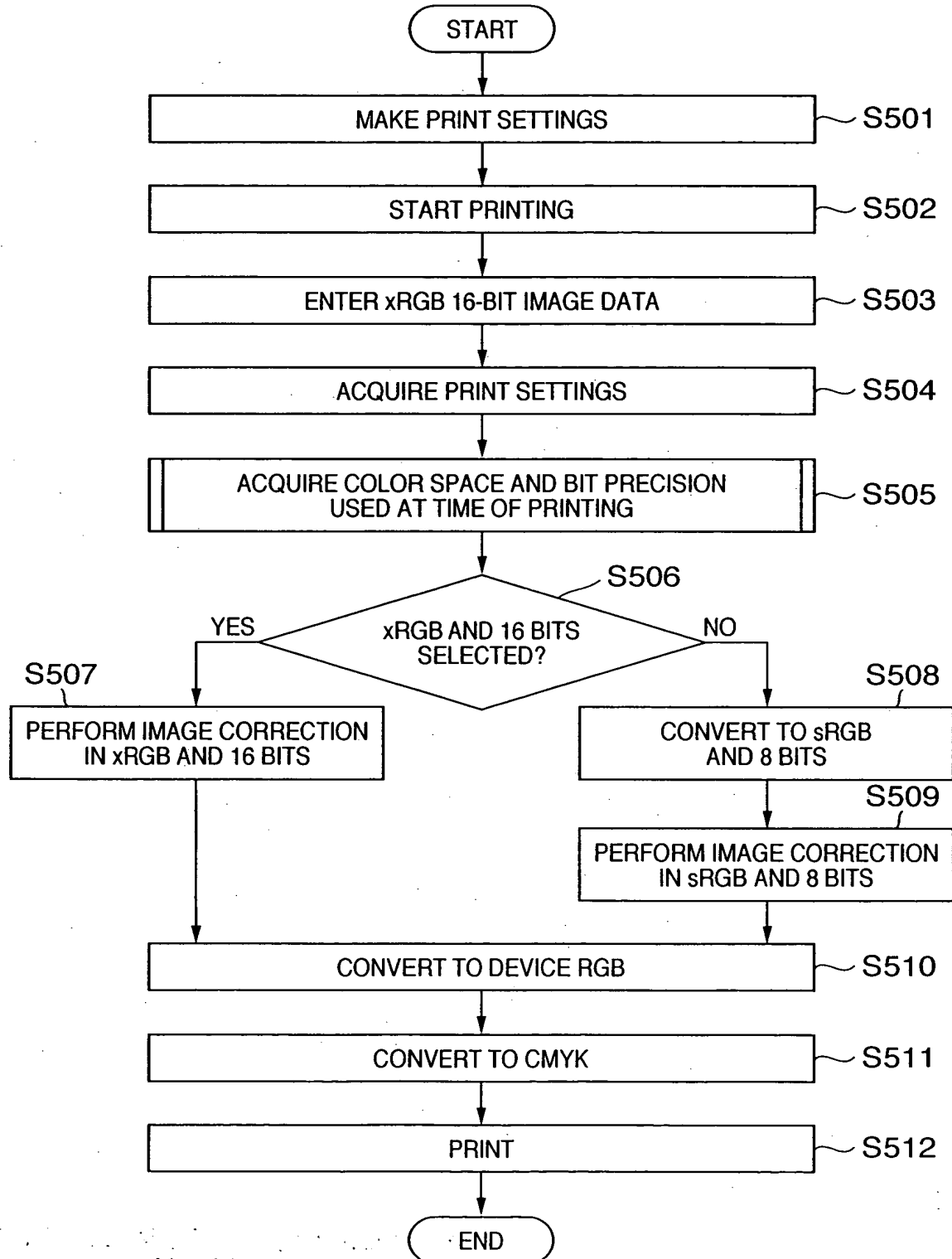
POSTCARD

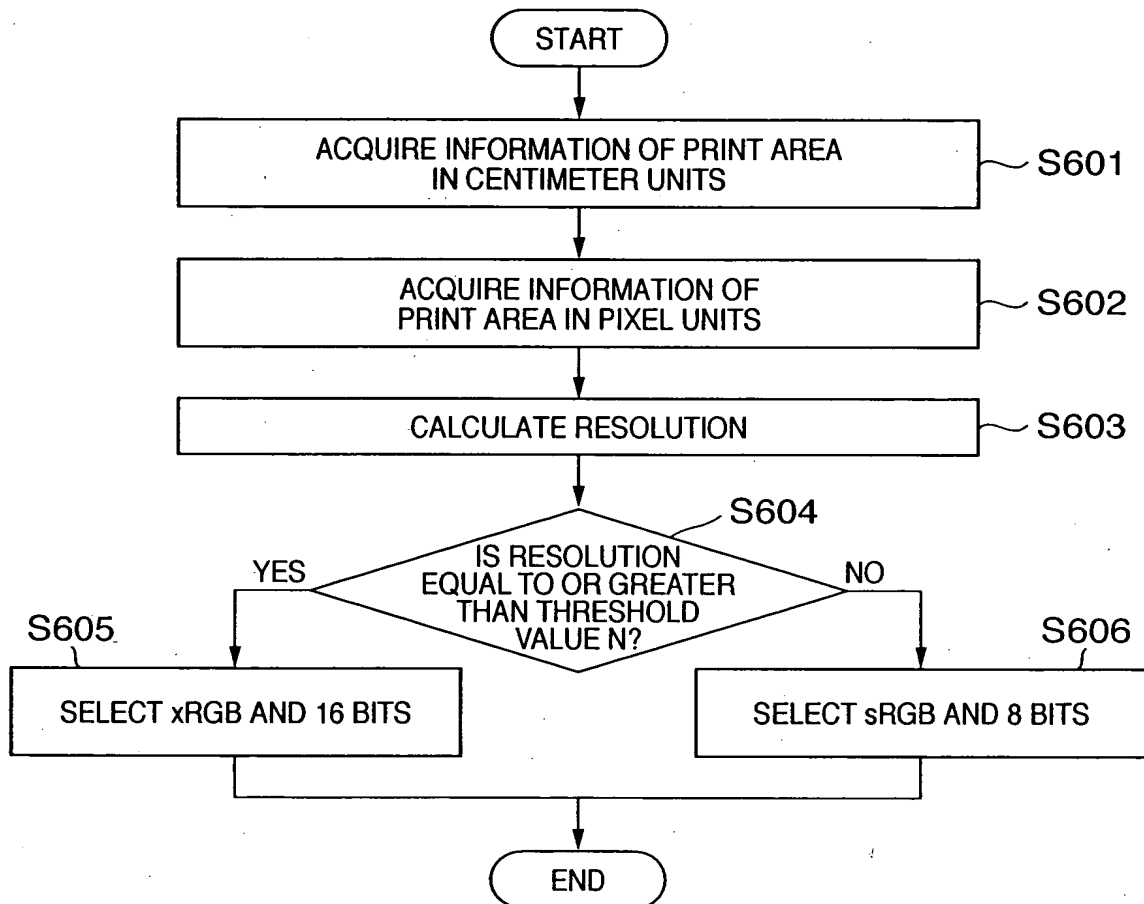
L

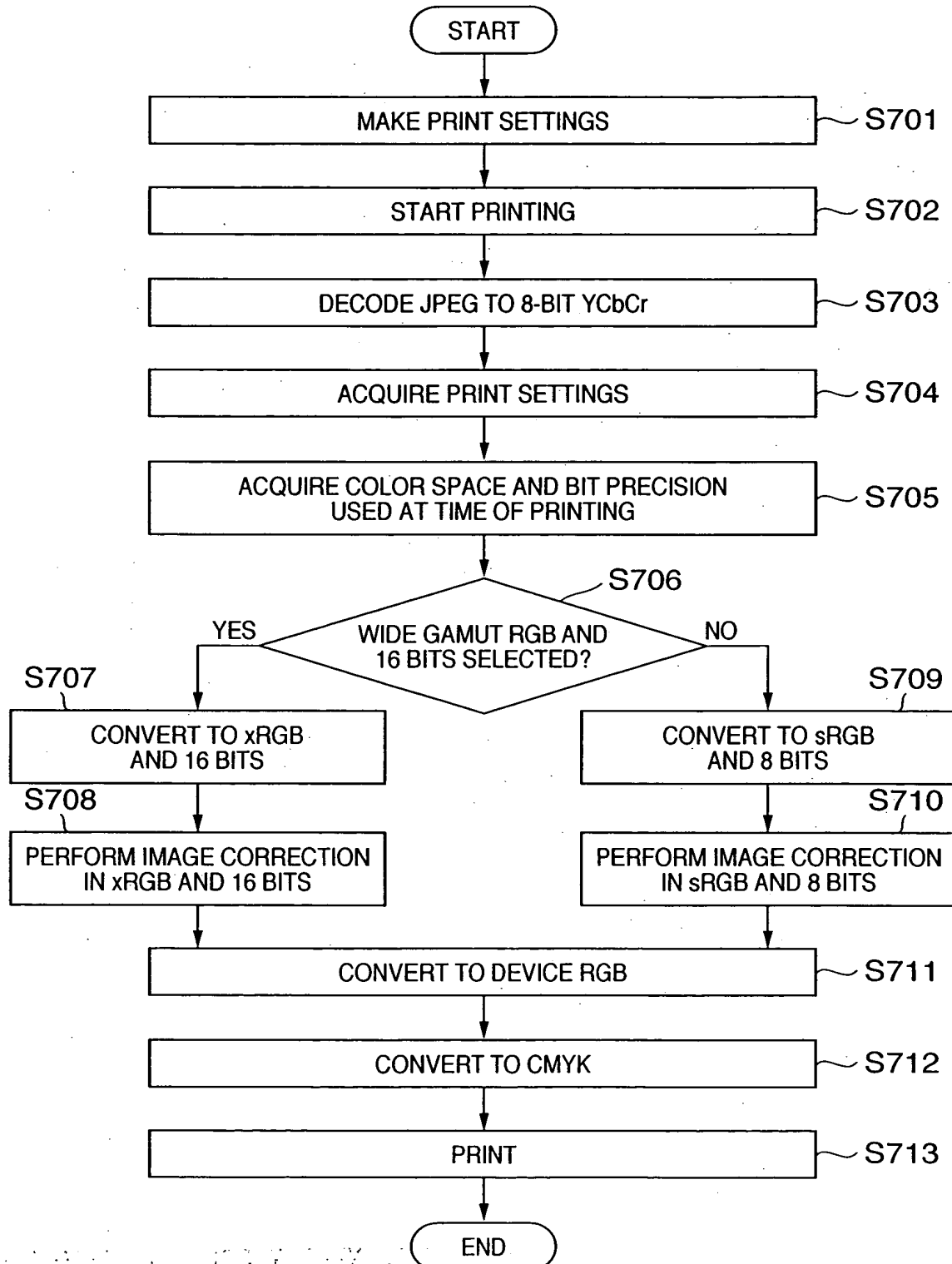
2L

OK

**FIG. 4**

**FIG. 5**

**FIG. 6**

**FIG. 7**

# FIG. 8

## CONVERSION METHOD 801 FOR CONVERSION FROM YCbCr TO WideGamutRGB

$$\begin{pmatrix} Y/255 \\ (Cb-128)/255 \\ (Cr-128)/255 \end{pmatrix} \rightarrow \begin{pmatrix} XD65 \\ YD65 \\ ZD65 \end{pmatrix} \text{--- (1)} \quad \begin{pmatrix} XD65 \\ YD65 \\ ZD65 \end{pmatrix} \rightarrow \begin{pmatrix} XD50 \\ YD50 \\ ZD50 \end{pmatrix} \text{--- (2)}$$

$$\begin{bmatrix} RW_{\text{GamutRGB}} \\ GW_{\text{GamutRGB}} \\ BW_{\text{GamutRGB}} \end{bmatrix} = \begin{bmatrix} 1.4623 & -0.1845 & -0.2734 \\ -0.5529 & 1.4480 & 0.0681 \\ 0.0346 & -0.0958 & 1.2877 \end{bmatrix} \begin{bmatrix} XD50 \\ YD50 \\ ZD50 \end{bmatrix} \text{--- (3)}$$

$$\begin{pmatrix} RW_{\text{GamutRGB}} \\ GW_{\text{GamutRGB}} \\ BW_{\text{GamutRGB}} \end{pmatrix} \rightarrow \begin{pmatrix} R'_{\text{WGamutRGB}} \\ G'_{\text{WGamutRGB}} \\ B'_{\text{WGamutRGB}} \end{pmatrix} \text{--- (4) (Linear-TO-NonLinear GAMMA CONVERSION)}$$

$$\begin{aligned} R(16) &= \text{round}(R'_{\text{WGamutRGB}} \times 65535) \\ G(16) &= \text{round}(G'_{\text{WGamutRGB}} \times 65535) \\ B(16) &= \text{round}(B'_{\text{WGamutRGB}} \times 65535) \end{aligned} \text{--- (5)}$$

## CONVERSION METHOD 802 FOR CONVERSION FROM YCbCr TO sRGB

$$\begin{pmatrix} R \\ G \\ B \end{pmatrix} = \begin{pmatrix} 1.000 & 0.000 & 1.402 \\ 1.000 & -0.3441 & -0.7141 \\ 1.000 & 1.772 & 0.000 \end{pmatrix} \begin{pmatrix} Y/255 \\ (Cb-128)/255 \\ (Cr-128)/255 \end{pmatrix} \text{--- (1)}$$

$$\begin{pmatrix} R \\ G \\ B \end{pmatrix} \rightarrow \begin{pmatrix} R' \\ G' \\ B' \end{pmatrix} \text{--- (2) (Linear-TO-NonLinear GAMMA CONVERSION)}$$

$$\begin{aligned} R(8) &= \text{round}(R'_{\text{sRGB}} \times 65535) \\ G(8) &= \text{round}(G'_{\text{sRGB}} \times 65535) \\ B(8) &= \text{round}(B'_{\text{sRGB}} \times 65535) \end{aligned} \text{--- (5)}$$



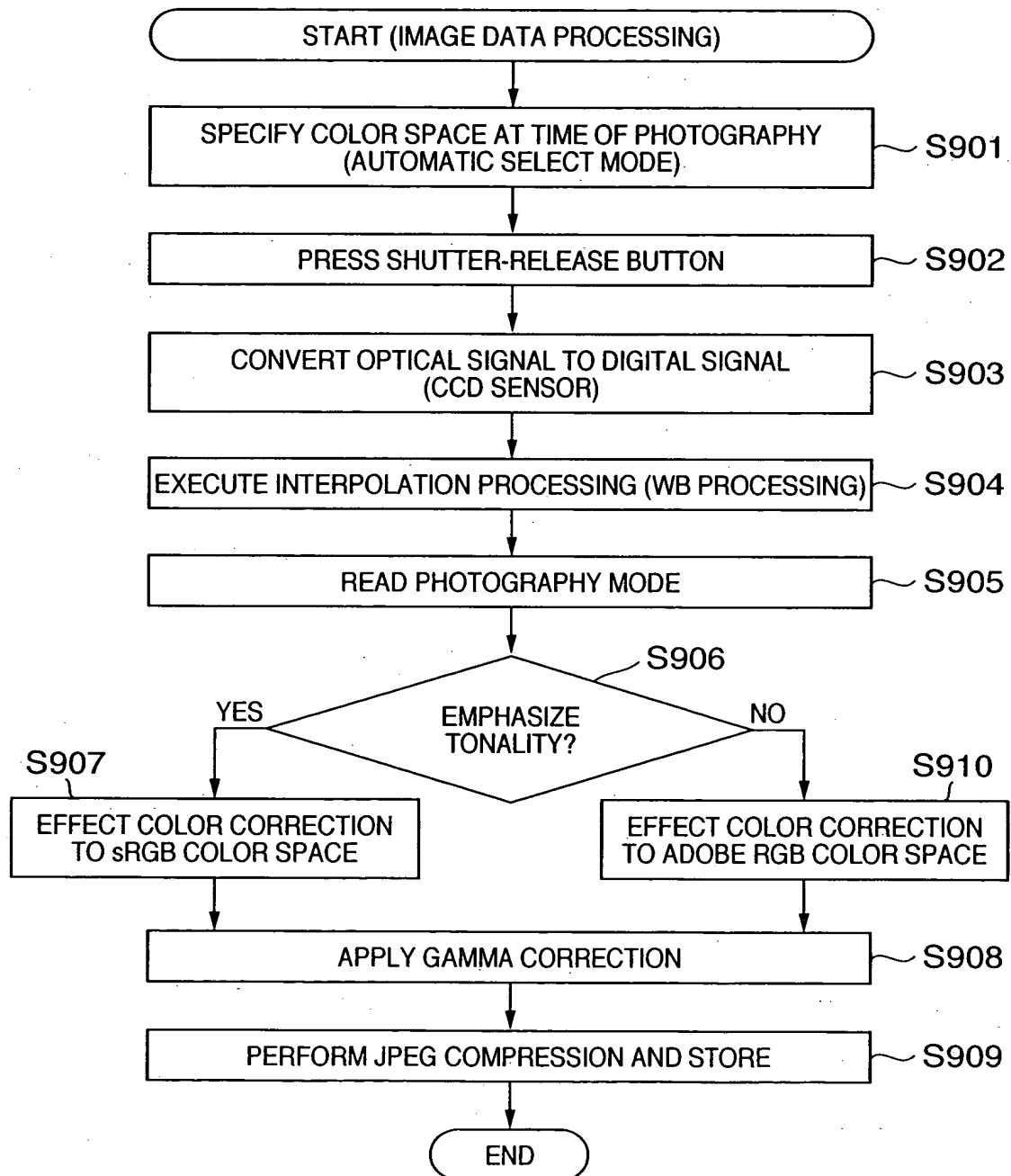
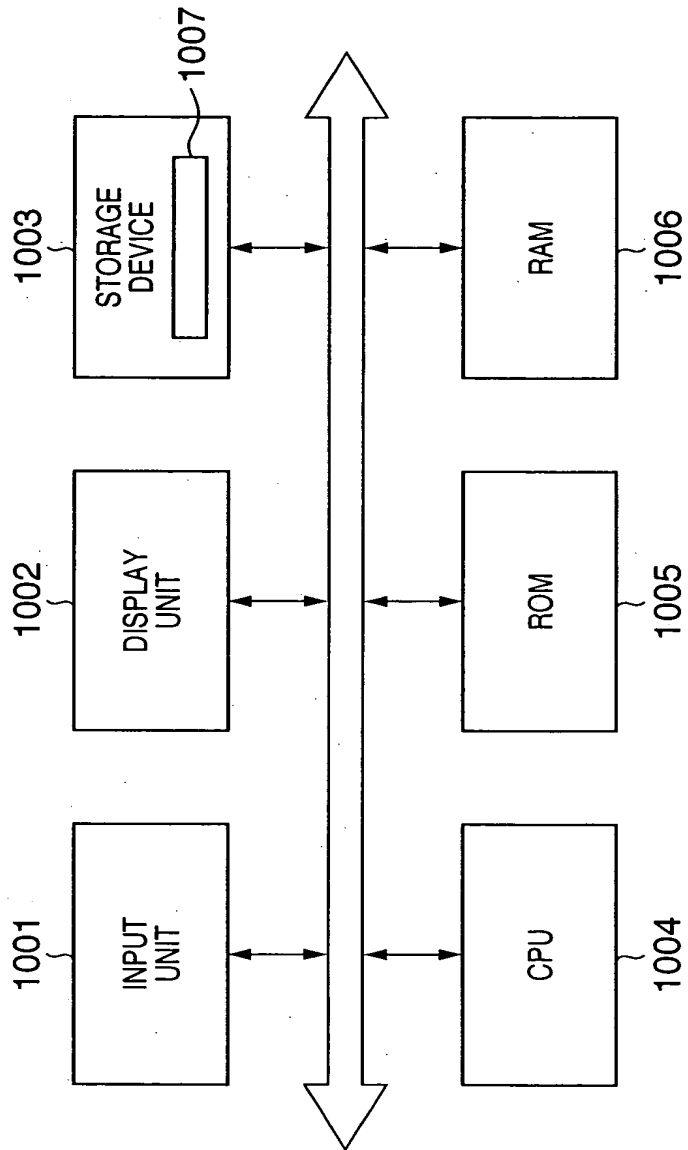
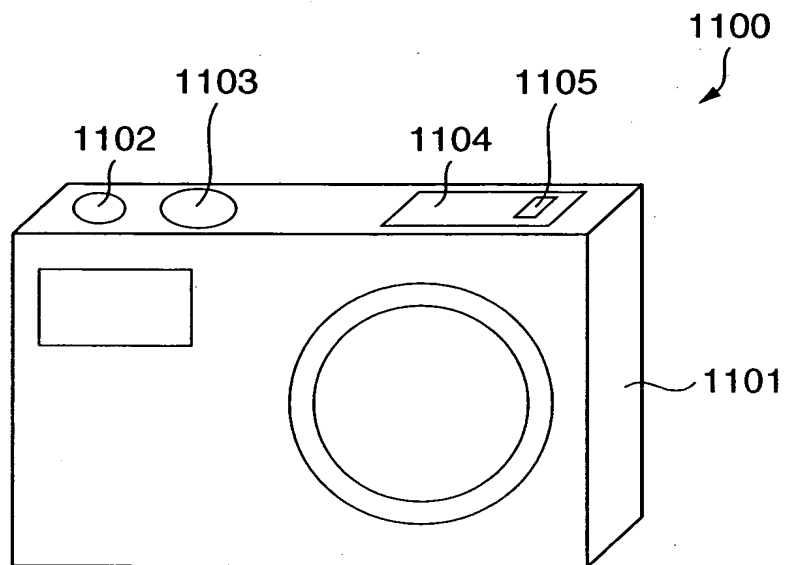
**FIG. 9**

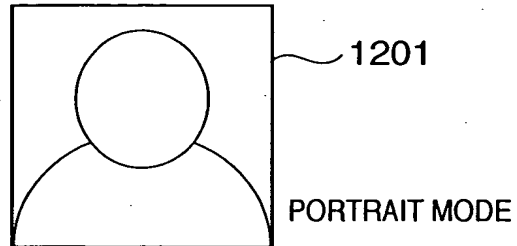
FIG. 10



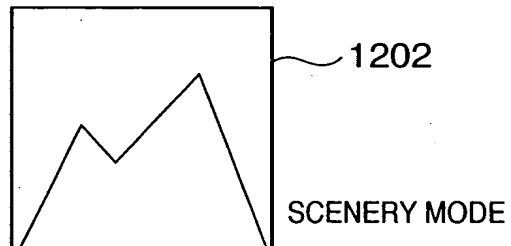
**FIG. 11**



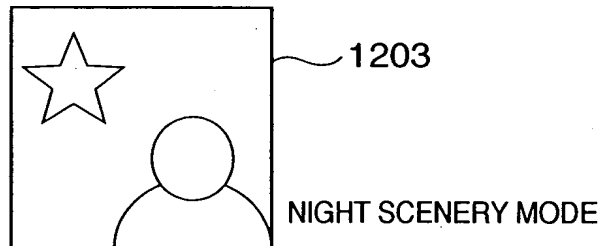
**FIG. 12A**



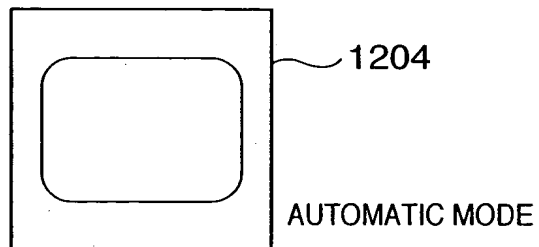
**FIG. 12B**

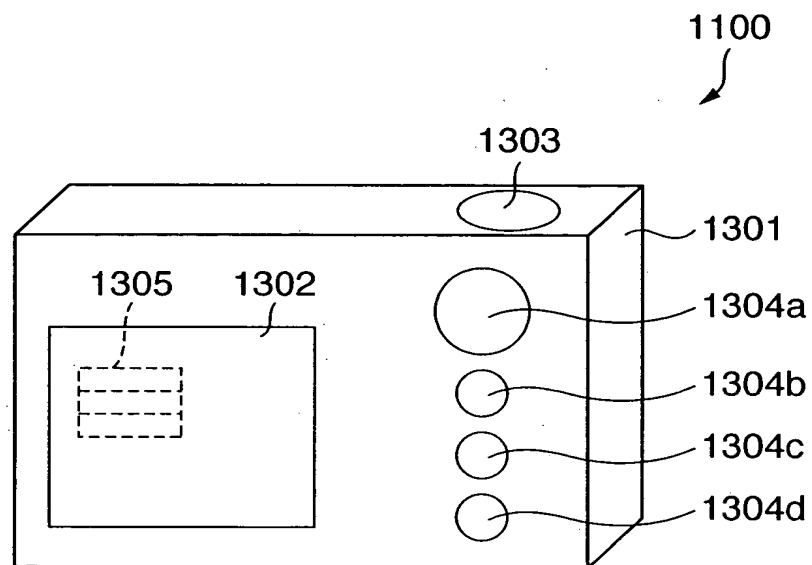


**FIG. 12C**

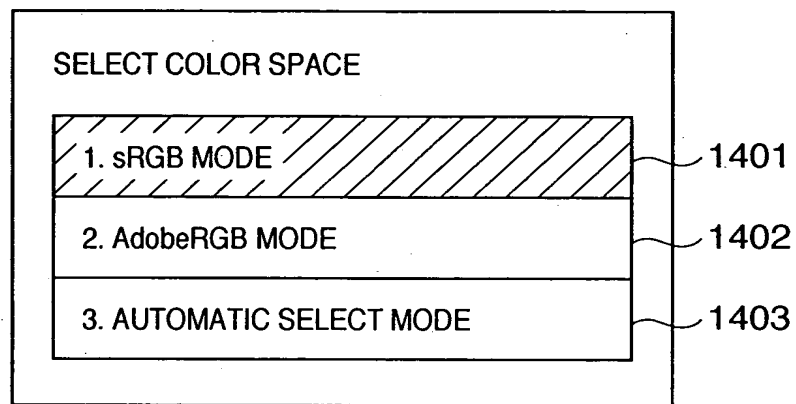


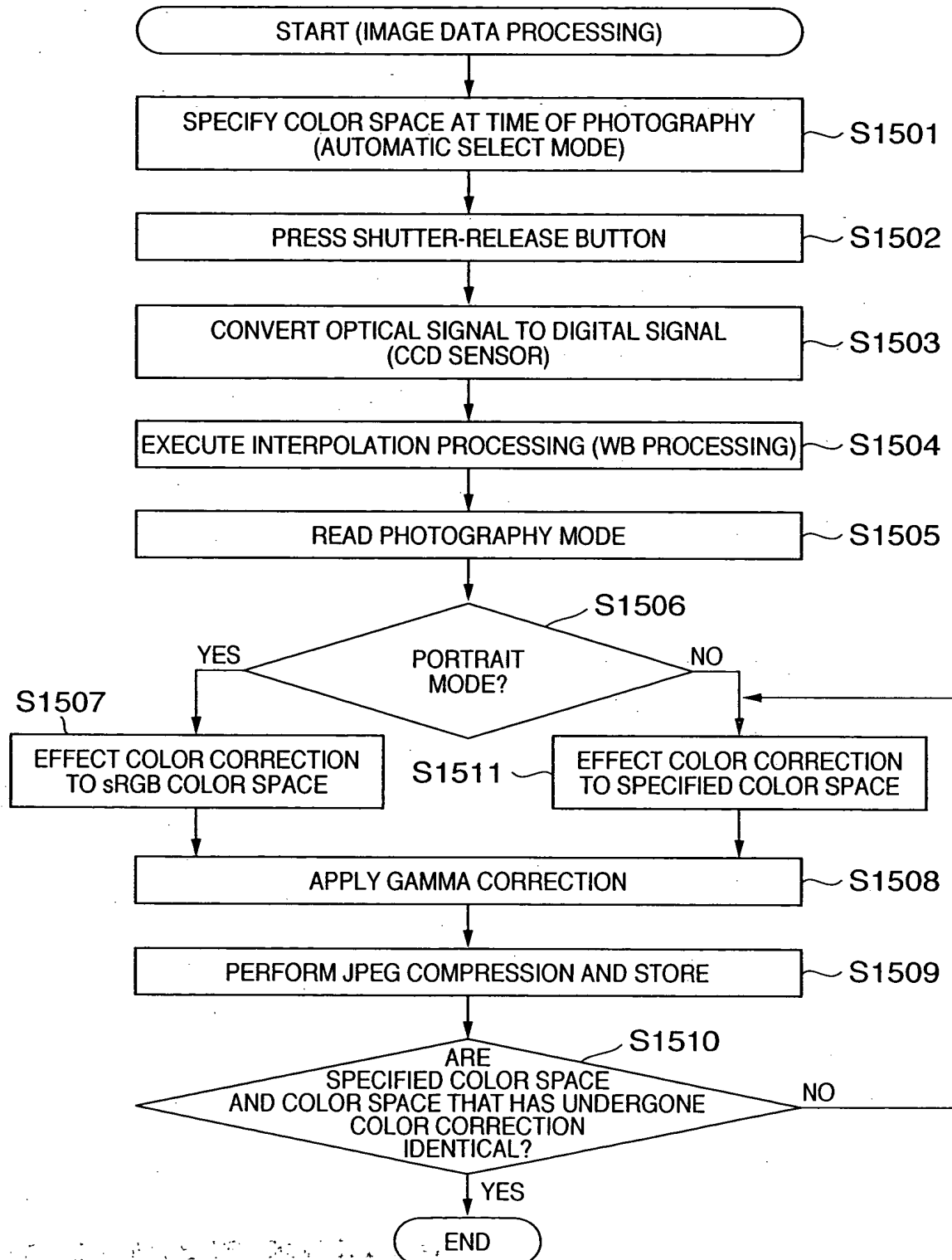
**FIG. 12D**

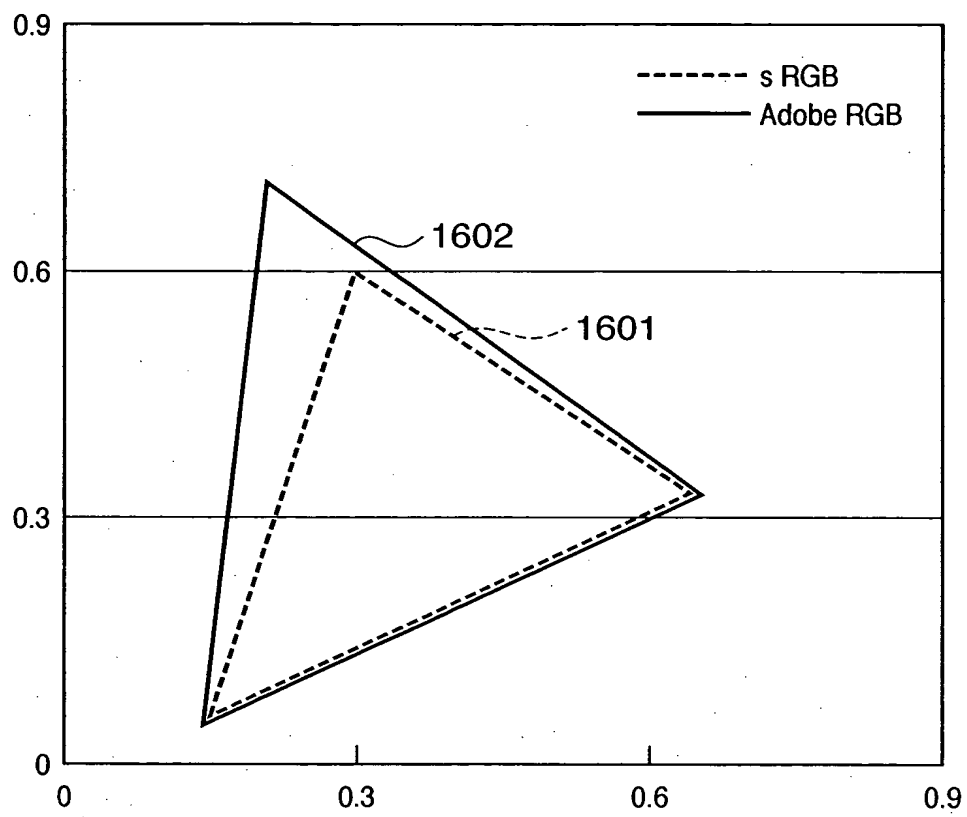


**FIG. 13**

**FIG. 14**



**FIG. 15**

**FIG. 16**



**FIG. 17**